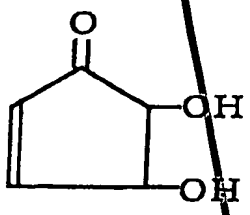
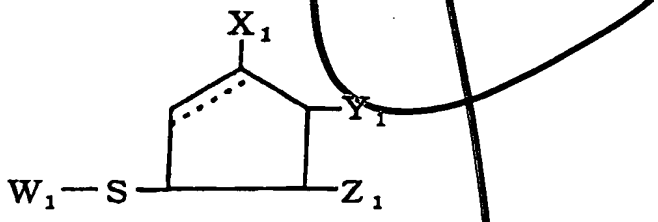
the pharmaceutical composition containing, as an active ingredient, an amount sufficient for said treating or preventing, in a unit dosage form, of a compound selected from the group consisting of 4,5-dihydroxy-2-cyclopenten-1-one of formula (I):



(I);

4-hydroxy-2-cyclopenten-1-one;

a compound of formula (II):

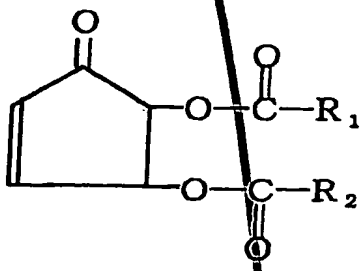


(II)

wherein a bond in the five-membered ring represented by a broken line means that the five-membered ring may be either a cyclopentene ring having a double bond or a saturated cyclopentane ring; in the case of a cyclopentene ring, X_1 is OH, Y_1 is =O and Z_1 is H; on the other hand, in the case

of a cyclopentane ring, X_1 is =O, Y_1 is OH and Z_1 is OH; W_1 is a residue in which a SH group is removed from a SH group-containing compound;

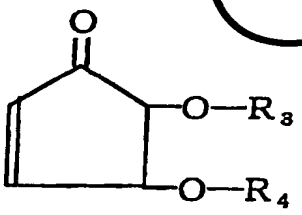
a compound of formula (III):



(III)

wherein R_1 and R_2 may be the same or different each other, and are hydrogen, or an aliphatic, aromatic or aromatic aliphatic group;

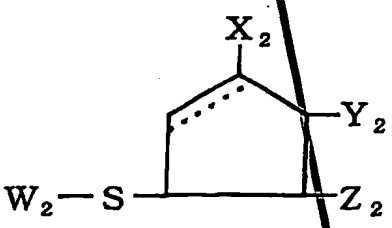
a compound of formula (IV):



(IV)

wherein R_3 and R_4 may be the same or different each other, and are hydrogen, or an aliphatic, aromatic or aromatic aliphatic group, provided that R_3 and R_4 are not simultaneously H;

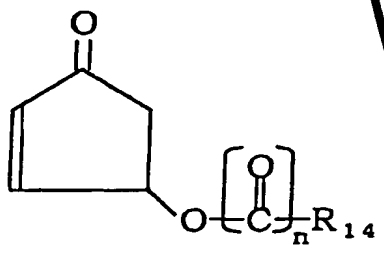
a compound of formula (V):



(V)

wherein a bond in the five-membered ring represented by a broken line means that the five-membered ring may be either a cyclopentene ring having a double bond or a saturated cyclopentane ring; in the case of a cyclopentene ring, X_2 is OR_5, Y_2 is =O and Z_2 is H; on the other hand, in the case of a cyclopentane ring, X_2 is =O, Y_2 is OR_6 and Z_2 is OR_7; R_5 is R_8 or $-(CO)-R_9$; R_6 is H, R_{10} or $-(CO)-R_{11}$; and R_8 is H, R_{12} or $-(CO)-R_{13}$ (wherein R_8, R_9, R_{10}, R_{11}, R_{12} and R_{13} may be the same or different each other, and are an aliphatic, aromatic or aromatic aliphatic group, and R_9, R_{11} and R_{13} may be H), provided that R_6 and R_7 are not simultaneously H; W_2 is a residue in which a SH group is removed from a SH group-containing compound;

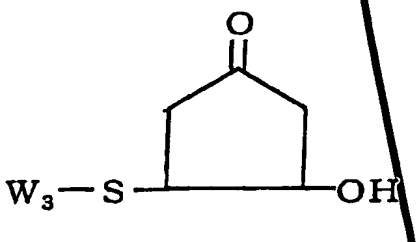
a compound of formula (VI):



(VI)

wherein R_{14} is an aliphatic, aromatic or aromatic aliphatic group, and n is 0 or 1, provided that if n is 0, R_{14} is not H;

a compound of formula (VII):



(VII)

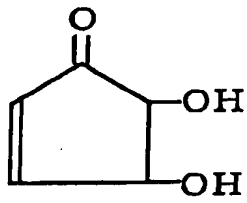
wherein W_3 is a residue in which a SH group is removed from a SH group-containing compound;

4-(9-adeninyl)-2-cyclopenten-1-one; and

4-(9-guaninyl)-2-cyclopenten-1-one.

5. (New) The pharmaceutical composition of claim 4 wherein said compound is selected from the group consisting of 4,5-dihydroxy-2-cyclopenten-1-one; the compound of formula II; the compound of formula III; the compound of formula IV; the compound of formula V; the compound of formula VI; the compound of formula IV; 4-(9-adeninyl)-2-cyclopenten-1-one; and 4-(9-guaninyl)-2-cyclopenten-1-one.

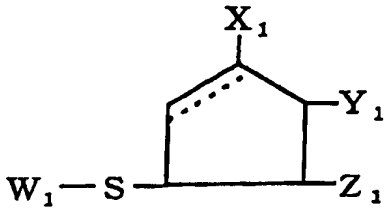
6. (New) A method for enhancing growth factor production and/or interleukin-12 production, the method comprising administering a composition containing, as an active ingredient, a compound selected from the group consisting of 4,5-dihydroxy-2-cyclopenten-1-one of formula (I):



(I);

4-hydroxy-2-cyclopenten-1-one;

a compound of formula (II):

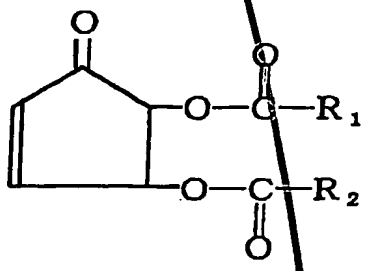


(II)

wherein a bond in the five-membered ring represented by a broken line means that the five-membered ring may be either a cyclopentene ring having a double bond or a saturated cyclopentane ring; in the case of a cyclopentene ring, X_1 is OH, Y_1 is =O and Z_1 is H; on the other hand, in the case

of a cyclopentane ring, X_1 is =O, Y_1 is OH and Z_1 is OH; W_1 is a residue in which a SH group is removed from a SH group-containing compound;

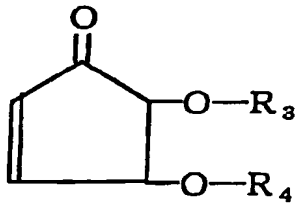
a compound of formula (III):



(III)

wherein R_1 and R_2 may be the same or different each other, and are hydrogen, or an aliphatic, aromatic or aromatic aliphatic group;

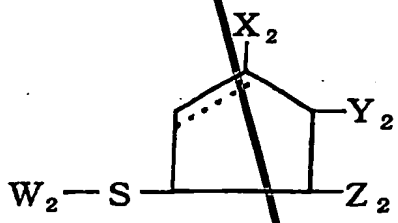
a compound of formula (IV):



(IV)

wherein R_3 and R_4 may be the same or different each other, and are hydrogen, or an aliphatic, aromatic or aromatic aliphatic group, provided that R_3 and R_4 are not simultaneously H;

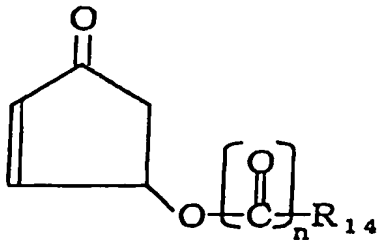
a compound of formula (V):



(V)

wherein a bond in the five-membered ring represented by a broken line means that the five-membered ring may be either a cyclopentene ring having a double bond or a saturated cyclopentane ring; in the case of a cyclopentene ring, X_2 is OR_5, Y_2 is =O and Z_2 is H; on the other hand, in the case of a cyclopentane ring, X_2 is =O, Y_2 is OR_6 and Z_2 is OR_7; R_5 is R_8 or $-(CO)-R_9$; R_6 is H, R_{10} or $-(CO)-R_{11}$; and R_8 is H, R_{12} or $-(CO)-R_{13}$ (wherein R_8, R_9, R_{10}, R_{11}, R_{12} and R_{13} may be the same or different each other, and are an aliphatic, aromatic or aromatic aliphatic group, and R_9, R_{11} and R_{13} may be H), provided that R_6 and R_7 are not simultaneously H; W_2 is a residue in which a SH group is removed from a SH group-containing compound;

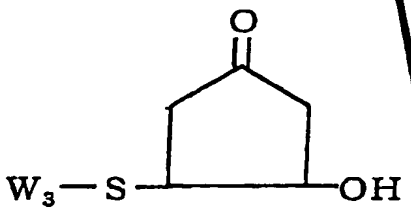
a compound of formula (VI):



(VI)

wherein R_{14} is an aliphatic, aromatic or aromatic aliphatic group, and n is 0 or 1, provided that if n is 0, R_{14} is not H;

a compound of formula (VII):



(VII)

wherein W_3 is a residue in which a SH group is removed from a SH group-containing compound;

4-(9-adeninyl)-2-cyclopenten-1-one; and

4-(9-guaninyl)-2-cyclopenten-1-one.

7. (New) The method according to claim 5, which is used for treating or preventing a disease that requires enhancement of growth factor production for its treatment or prevention and/or a disease that requires enhancement of interleukin-12 production for its treatment or prevention.

8. (New) The method according to claim 5, wherein the composition is a food or a drink.